# Montana Adolescent Sexual Health Report



Women's and Men's Health Section
Family and Community Health Bureau
Public Health and Safety Division
Montana Department of Public Health and Human Services





While the teen birth rate in Montana is declining, it has failed to drop as rapidly as

national rates.

From 2010 to 2015, the national birth rate declined by 35%, while Montana's teen birth rate declined by only 30%. Montana's teen birth rate is now higher than the national average (25.3/1000 vs 22.3/1000).

# Pregnancy & Birth

Teen pregnancy and birth rates continue to decline in Montana and the United States. Declines in teen pregnancy and birth rates in the US from 2007 to 2012 have been attributed to improvements in contraceptive use, especially use of long acting reversible contraceptives (LARCs). Efforts to further improve access to and use of contraception among adolescents are necessary to ensure they have the means to prevent pregnancy.<sup>1</sup>

Despite reaching historic lows in 2015, teen pregnancy and birth rates in the US continue to be among the highest when compared to the rates of other developed countries. The 2014 US teen birth rate was six times higher than Denmark, Japan and the Netherlands, and eight times higher than Switzerland.<sup>2</sup>

**Table 1: Montana teen birth, 2010-2015** (The teen birth rate is the number of live births to females aged 15-19 years per 1000 females aged 15-19 years)

Number of births	2010	2011	2012	2013	2014	2015	
15-17 years	247	231	229	229	237	159	
18-19 years	882	697	659	624	570	590	
15-19 years	1129	928	888	853	807	770	
Birth rates per 1,000	2010	2011	2012	2013	2014	2015	Percent Change: 2010 to 2015
15-17 years	13.1	12.4	12.5	12.6	13.0	8.7	-33%
18-19 years	66.8	53.0	51.1	49.6	46.3	48.2	-28%
15-19 years	35.2	29.2	28.5	27.7	26.4	25.3	-28%
National Birth Rate							
15-19 years	34.2	31.3	29.4	26.5	24.2	22.3	-35%

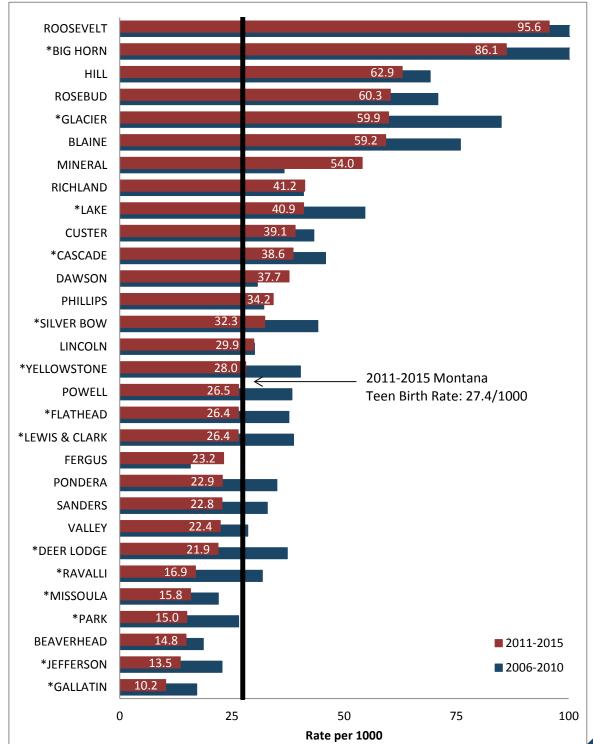
**Table 2: Montana teen pregnancy, 2010-2015** (The teen pregnancy rate is the number of pregnancies to females aged 15-19 years per 1000 females aged 15-19 years)

Number of pregnancies	2010	2011	2012	2013	2014	2015	
15-17 years	348	327	315	301	296	242	
18-19 years	1091	911	844	774	706	707	
15-19 years	1439	1238	1159	1075	1002	949	
Pregnancy rates per 1,000	2010	2011	2012	2013	2014	2015	Percent Change 2010 to 2015
15-17 years	18.4	17.6	17.2	16.5	16.2	13.3	-28%
18-19 years	82.6	69.2	65.5	61.5	57.4	57.8	-30%
15-19 years	44.8	39.0	37.2	34.9	32.8	31.2	-30%

Source: MT Department of Public Health and Human Services (DPHHS), Office of Vital Statistics, 2016; CDC, National Vital Statistics Report. Births: Preliminary Data for 2015.

#### Teen Birth Rates in Montana

Figure 1: Teen birth rates per 1,000 females age 15-19 years by Montana County, 2006-2010 and 2011-2015



Over the two time periods the teen birth rates declined in 24 counties, 14 of which were statistically significant reductions.

These counties include:

\*Ravalli (-47%)

\*Park (-43%)

\*Deer Lodge (-41%)

\*Jefferson (-4<u>1%)</u>

\*Gallatin (-40%)

\*Lewis & Clark (-32%)

\*Yellowstone (-30%)

\*Flathead (-30%)

\*Glacier (-30%)

\*Missoulà (-28%)

\*Silver Bow (-27%)

\*Lake (-25%)

\*Big Horn (-24%)
\*Cascade (-16%)

Source: DPHHS, Office of Vital Statistics, 2016

Note: Due to the small number of events in some counties, five year rates have been used to include more counties. Counties not included on the graph had fewer than 20 births in one or both intervals; rates based on fewer than 20 events are not statistically reliable. Counties are listed in descending order of the 2011-2015 rates.

<sup>\*</sup> Under 15 years: The number of births to teens under 15 is small. Because the number of births to girls younger than 15 years can fluctuate greatly from year to year, rates and change over time are not shown for teens in this age group.

## Sexual Activity

#### Risk Factors

Although teen birth rates continue to decline, most teens often use condoms and birth control pills which are less effective at preventing pregnancy when not used correctly or consistently.<sup>3</sup> In 2015, 13.3% of 9th graders in Montana reported being sexually active (have had sexual intercourse with at least one person in the last 3 months) compared to 15.7% nationally. By comparison, 46.7% of 12th graders reported they were sexually active (46.0% nationally).

Figure 2: Montana high school students who are currently sexually active vs. ever had sex, by grade, 2015

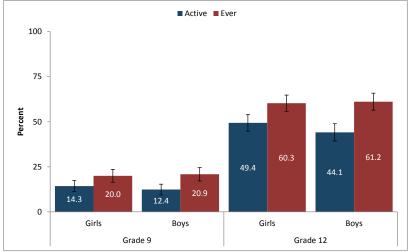
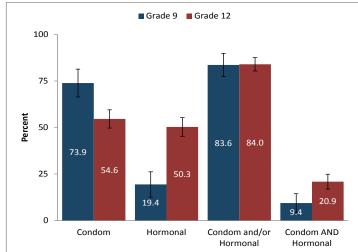


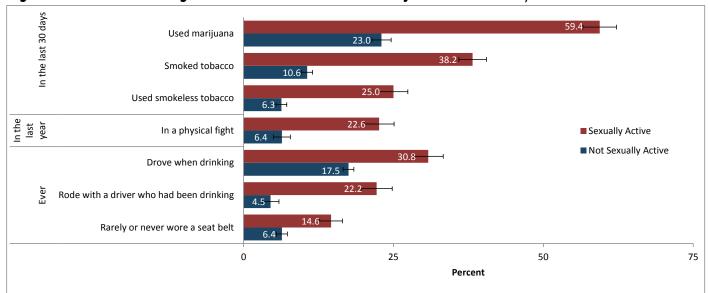
Figure 3: Montana high schools students who are sexually active and used contraceptives, by grade, 2015



Source: Montana Youth Risk Behavior Survey, 2015 I = 95% Confidence Interval

Teens who engage in some types of risky behaviors are more likely to engage in other behaviors that increase risk for teen pregnancy. Risk factors encourage behaviors that might lead to pregnancy or sexually transmitted infections (STIs). Research has shown an association between the following risk behaviors and teen pregnancy. <sup>6</sup> Comprehensive sex education curricula in school and community settings have been shown to reduce teen pregnancy and associated risky behaviors.<sup>7</sup>

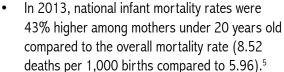
Figure 5: Risk factors among teens who are and are not sexually active in Montana, 2015



Source: Montana Youth Risk Behavior Survey, 2015 I = 95% Confidence Interval

## Pregnancy Outcomes

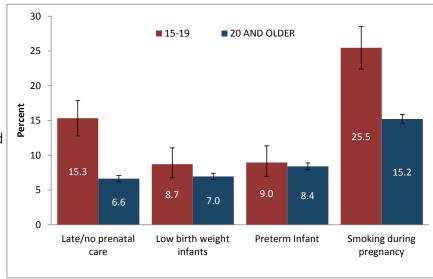
#### Teenage childbearing can have lasting consequences for both the mother and newborn. Teens are more likely to have lowbirth weight and preterm babies, and their babies are far more likely to be born into families with limited educational and economic resources, which serve as barriers to future success.<sup>4</sup>



 In 2015, the percent of Montana teen mothers who entered prenatal care late, or did not have any prenatal care, was 132% higher than the percent for women over 20 years.

In 2015, Montana teen mothers smoked during pregnancy at a rate 67% higher than older mothers.

Figure 4: Late prenatal care, low birth weight, preterm birth, and smoking during pregnancy in Montana, by age of mother, 2015



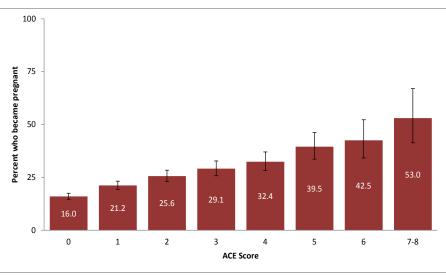
Source: DPHHS, Montana Office of Vital Statistics, 2016 I = 95% Confidence Interval

# Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are stressful or traumatic events experienced before adulthood. These experiences include physical, sexual, or emotional abuse; witnessing domestic violence; parental divorce; and exposure to a substance abusing, mentally ill, or criminal household member. An ACE score counts the different types of ACEs experienced. Research indicates that women with higher ACE scores were more likely to have gotten pregnant as teens. In a study published in 2001, 16% of women with an ACE score of 0 reported becoming pregnant as adolescents, versus 53% of women with an ACE score of 7-8 (Figure 6).8

Being aware of the potential impacts of ACES, providing trauma-informed services, and offering evidenced-based programs and services are critical to health promotion with vulnerable groups of young people.

#### Figure 6: ACE score as a predictor of teen pregnancy



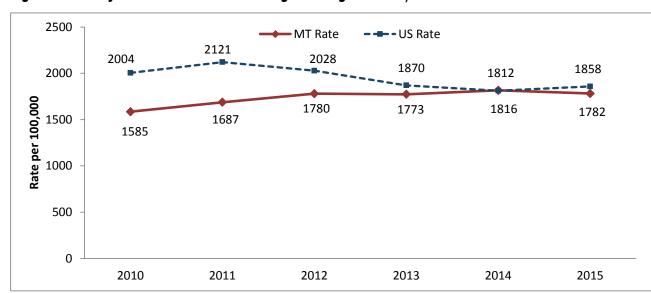
Source: Figure created from data in Hillis et al. 2001 I = 95% Confidence Interval



# Sexually Transmitted Infections

- An estimated one in four sexually active women between the ages of 15-24 has an STI.9
- The national teen chlamydia rate has decreased by 7% from 2010 to 2015; during this time, the teen chlamydia rate in Montana has increased by 12% (Figure 7).
- In 2015, there was an average of 25 new teen STI cases per week in Montana. Although only 6.2% of Montanans were 15-19 years old they made up 25% of gonorrhea, syphilis, and chlamydia diagnoses.

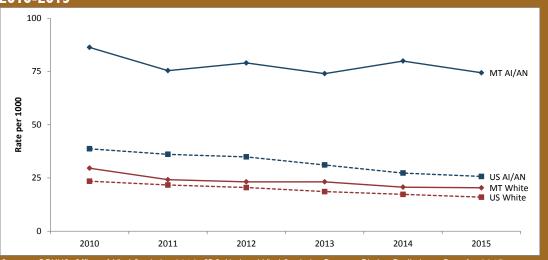
Figure 7: Chlamydia rates in Montana among teens aged 15-19, 2010-2015



Source: DPHHS, STD/HIV Prevention Section, 2016.

### Disparities

Figure 8: Teen birth rates in Montana per 1,000 females age 15-19 years by race, 2010-2015





Source: DPHHS, Office of Vital Statistics 2016; CDC, National Vital Statistics Report, Births: Preliminary Data for 2015.

Birth rates have been declining among both white and American Indian/Alaska Native (Al/AN) teens in Montana. However, racial disparities persist. In 2015, the birth rate among white Montanan teens was about 28% higher than the US white teen birth rate. By contrast, the 2015 birth rate among Montana Al/AN teens was 190% higher than Al/AN teens nationwide, and 260% higher than white Montana teens.

Figure 9: Chlamydia rates in Montana among teens aged 15-19 by race, 2013-2015

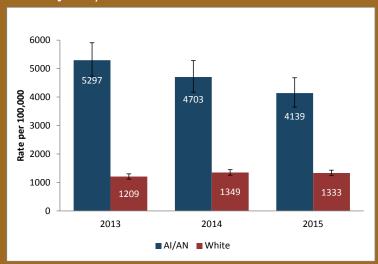
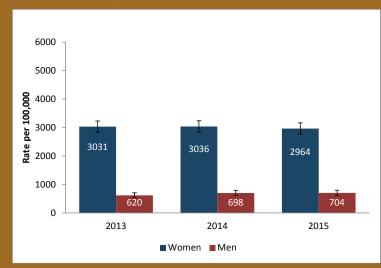


Figure 10: Chlamydia rates in Montana among teens aged 15-19 by gender, 2013-2015



Source: DPHHS, STD/HIV Prevention Section, 2016.

- Although chlamydia rates among Al/AN teens have been decreasing since 2013, Al/AN teens still experience almost 3 times higher chlamydia rates than white teens in Montana (Figure 9).
- In 2015, chlamydia rates for females 15-19 years old were 4.2 times higher than rates for males (Figure 10).
- While the disease burden is probably highest among these groups, the high rate may also be due to females typically seeing their doctor more often than men and screening recommendations that all sexually active females ≤25 years, who present for routine healthcare visits, receive screening for chlamydia.<sup>10</sup>
- For some STIs, such as chlamydia, females may have increased susceptibility to infection because of increased cervical ectopy.

#### Recommendations

- Adolescent sexual health comprises much more than the absence of pregnancy, early childbearing, or infection. To fully support the health
  needs of young people, we need to address their physical, social, emotional and cognitive development, and give them skills and support to
  navigate healthy relationships.
- Parents need to be supported in their role as sexuality educators. Honest, accurate and developmentally appropriate information from parents, grandparents, and other adult caregivers is the first step towards raising healthy children who make responsible decisions about sex, sexuality and relationships.
- The Montana Personal Responsibility Education Program (PREP) provides evidenced-based teen pregnancy and sexually transmitted infection prevention education to middle and high school students in seven locations across Montana. The middle school curriculum helps students develop personal limits and skills needed to maintain those limits when challenged. The high school curriculum takes an active approach teaching refusal skills, delaying sexual activity and alternative actions youth can use to abstain or use protection.
- The Montana Title X Family Planning program provides affordable, confidential, quality reproductive health services in 25 locations throughout
  Montana that respect, empower, and educate individuals, including adolescents, to reduce the rate of unintended pregnancy and sexually
  transmitted infections.

For more information on PREP and Title X Family Planning go to: www.familyplanning.hhs.mt.gov

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